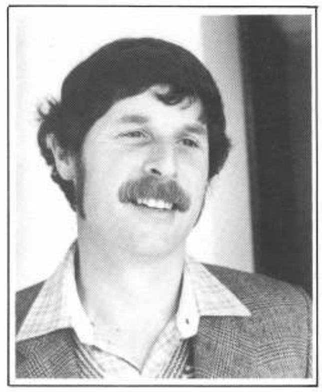
throughout New Zealand will be planted with ornamental trees and shrubs which we hope will be another pollen source for our bees. It is over to all beekeepers to promote the planting of pollen and nectar bearing trees when talking to farmers, catchment board, nurserymen, or anyone who may be planting trees.

Beekeeping has become one of the biggest growth industries in New Zealand with an over eight per cent increase in beekeepers, and the likelihood of numbers increasing at a greater rate over the next few years.

It is essential that we all maintain a high standard of hive management and disease control so that we continue our record of being one of the few countries in the world that does not have the major bee diseases or a ban on exporting honey, bees and bee related products.

I welcome the Auckland branch of the NBA back with us and hope that with new life they will become one of the most active branches.

This year we have had two executive members stand down from the committee. I thank Mike and Steve for the work they did and hope they will keep up the good work from their own district. To the new members of the executive – Allan McCaw of Milton and Dudley Ward of Dannevirke – we look forward to working with you and benefiting from your expertise.



Allen McCaw, newly-elected NBA vice-president



Tony Lorimer, NBA executive member

To Mrs James of our office staff who unfortunately was taken ill recently we wish a speedy recovery and thank her for all the help she has given us in the past.

I thank the executive committee, Mr Steuart Goodman, our secretary, for all the support they have given me throughout the year.

MAF ADVISORY REPORT

Presented by Murray Reid, MAF national apicultural advisory officer

ORGANISATION AND STAFFING

A display panel at the conference illustrated some of the functions of the apiary section within Advisory Services Division (ASD) and the work at Wallaceville.

The Advisory Services Division's responsibilities to the beekeeping industry includes providing an effective advisory service, certifying export shipments of bee products, maintaining a quarantine service to prevent the introduction of harmful diseases, pests and undesirable genetic characteristics, and ensuring that beekeepers meet their obligations in controlling bee diseases. The Division sees its principle function as assisting and encouraging primary producers to achieve increased economic returns, particularly from export.

During the past year, Mr Cliff van Eaton took up the position of apicultural advisory officer in Gore. This position had been left vacant following the transfer of Mr Trevor Bryant to Tauranga. Mr van Eaton had been employed for a number of years as an inspector and on a bee breeding project with the Department of Agriculture in British Columbia. Mr van Eaton has been putting these skills to good use since his arrival in Gore.

With the transfer of Mr G.M. Walton, formerly chief advisory officer apiculture, to other duties, national responsibility for apiculture was assumed by G.M. Reid, apicultural advisory officer, Hamilton.

Mr John Smith, apicultural advisory officer, Christchurch has been responsible for developing a computer programme for apiary registration. The programme is completed and some regions with access to micro computers have converted their apiary records to the computer. Beekeepers in these regions will receive their annual statement of inspection forms and list of apiaries on computer printout.

Field officers of ASD continued to support apicultural advisers with disease check inspections, export certifications, apiary registrations and general advisory programmes. Livestock officers and beekeepers also assisted with disease control measures. Their co-operation is gratefully acknowledged.

Apiary staff continued to liaise with other government departments. A number of beekeepers have been assisted in making loan applications to the Rural Bank or to the Department of Trade and Industry for regional development finance.

BEEKEEPING STATISTICS

Beekeepers, apiaries and hives: As at May 31 1983 there were 6445 NZ beekeepers maintaining 23644 registered apiaries and owning 269043 hives.

The number of beekeepers and beehives continues to grow. Hive numbers traditionally increase in times of economic downturn but in areas like the Bay of Plenty, increases in hive numbers have been over 19 per cent in the past year. This increase has been primarily to meet the demands of kiwifruit pollination. Other high growth regions include Auckland, Waikato, Poverty Bay and Oamaru.

Honey crop: The surplus honey crop for the 1982-83 season was assessed at 5053 tonnes. This is the smallest honey crop since 1976 when 4915 tonnes was produced and the smallest production per colony ever recorded. Production was down in both islands but hardest hit was Southland where only 150 tonnes was produced; 0.5 t/100 hives, eight year average 3.6 t/100. The six year average in Southland is 995 tonnes and 975 tonnes was produced in the previous season.

A survey carried out by Mr van Eaton, apicultural advisory officer, Gore involved 28 of Southland's commercial beekeepers (78 per cent of the hives). This showed that 50 per cent of the beekeepers surveyed had no crop, 20 per cent of the colonies needed extensive autumn feeding and 53 per cent of the beekeepers had consulted the Rural Bank for disaster relief.

Mr van Eaton assisted the beekeepers in making a successful application to the Rural Bank to accept hives as collateral.

American Brood Disease (ABD): Responsibility for disease control belongs with the owners of the beehives. It is of continual concern to the Ministry that a significant number of beekeepers are not carrying out a sufficiently rigorous check of their own colonies or reporting ABD disease when

they do find it. Some hobbyist beekeepers are not destroying diseased hives properly or attempting to salvage diseased equipment contrary to the Apiaries Act.

The Ministry continued to maintain a part-time disease inspection service using field officers, livestock officers and beekeepers. Inspection efforts were concentrated on the hobbyist and semi-commercial beekeeper group.

A minor disorder of brood, which has been termed "Half-moon disorder", still defies diagnosis. Only about 40 cases were reported last year and hives "infected" usually responded to requeening.

American Brood Disease levels in apiary districts 1982/83

Apiary district	Diseased apiaries Number	%	Diseased hives Number	%
Auckland (Region)	154	4.2	407	1.5
Hamilton	152	5.7	257	0.63
Tauranga	51	2.21	117	0.37
Palmerston North	144	4.3	182	0.50
Nelson	68	3.9	104	0.59
Christchurch	34	0.99	111	0.30
Oamaru	80	2.9	105	0.27
Gore	75	3.9	192	0.30
Total	**758**	**3.5**	**1475**	**0.56**

Advisory activities

Advisory Services Division continued to focus its main activities towards agricultural and horticultural industries that are actively exporting or have a potential to do so.

Workshops, seminars and discussion groups at district level and courses at Flock House and Telford Farm Training Institutes concentrated on queen production, expanding into commercial beekeeping, financial management and pollination.

The demand for hives for pollination of high country pastures and kiwifruit is placing a strain on established beekeepers to meet this demand. It is now obvious that hives for kiwifruit pollination require different management than for honey production. If sufficient pollinating colonies are to be produced in areas like the Bay of Plenty, Poverty Bay and South Auckland, then some new beekeepers will be forced to rely on pollination fees as their main source of income.

A visit to New Zealand by Dr Cam Jay from Manitoba was initiated and co-ordinated by apiary staff. Dr Jay carried out research work on kiwifruit pollination and spoke to over 26 groups of growers and beekeepers while in New Zealand.

Kerry Simpson, apicultural advisory officer, Oamaru has been involved with a bilateral aid programme to Tuvalu (formerly the Allice Islands) while apicultural advisory officer, Matheson, Nelson has acted as a consultant to FAO on a beekeeping project in Jamaica.

Beekeeping on the Chatham Islands continues to develop under the watchful eye of John Smith, apicultural advisory officer, Christchurch. There are now 38 beekeepers owning 130 hives on the islands. This year 150 kg of honey was "exported" to New Zealand. Some of this honey was the purest sample of white clover ever obtained in New Zealand based on pollen analyses.

Export certification: MAF continued to issue export certificates on demand although some beekeepers are still not giving the required two weeks advance notice of intention to export. MAF will only certify to the standards or conditions demanded by the government of the importing country. Importers may have their own requirements over and above those of their government but meeting these standards is the responsibility of the exporter alone.

MAF RESEARCH REPORT

Report from the Apiculture Section, Wallaceville Animal Research Centre to the 1983 Conference of the National Beekeepers' Association of New Zealand

STAFF

The Apiculture Section now consists of Mr Pat Clinch (scientist, section leader) and Mr Mark Schrader (technician). In addition, we have had the part-time assistance of Dr Allen Heath (scientist) and Mr John Tenquist and Mrs Dallas Bishop (technical officers) of the Ectoparasitology Section, Wallaceville.

KIWIFRUIT POLLINATION

Effect of male:female vine ratios: It has been observed that kiwifruit formed from female flowers close to male vines are often visibly larger than fruit formed from flowers distant from males. It is possible that if male vines are too far apart, honey bees may be unable to effectively pollinate all female flowers. In 1981, studies were started in kiwifruit plantations near Tauranga and at Te Puke to determine whether the ratio of male vines to female vines, and the distribution of male vines among females, can affect pollination.

In the 1981–82 season, honey bee visitation to kiwifruit flowers was satisfactory in the plantations studied. In six of the nine plantations, regardless of male to female ratios, fruit formed from flowers close to males was significantly heavier and contained significantly greater weights of seed than that formed from flowers distant from males. Fruit in plantations with more males than the 1:8 male:female ratio tended to be heavier and contain more seeds than that in plantations with a 1:8 ratio.

In the 1982–83 season, honey bee visitation to kiwifruit flowers was satisfactory. Compared with the previous season, female vines had 50 per cent more flowers, and at harvest, fruit was about 14 per cent lighter. In six of the 11 plantations studied, fruit formed from flowers close to males was significantly heavier than that formed from flowers distant from males. Fruit in plantations with more males than the 1:8 ratio tended to be heavier than that in plantations with a 1:8 ratio. Seed content of this fruit has still to be determined.

Weight of seed as an indicator of pollination: Weight or size of fruit has often been used as an indicator of the level of kiwifruit pollination. However it appears that weight of seed per fruit is a much better indicator. Although the two are correlated (heavier fruit usually have more seeds), seed content is less affected by post-blossom weather conditions. In one plantation where a hailstorm retarded the growth of fruit, it was possible to estimate that at harvest fruit were about 20 per cent lighter than would be expected from their seed weight.

Microclimate in kiwifruit plantations (1) wind: Measurements of air flow in the centre of a kiwifruit block and ▶